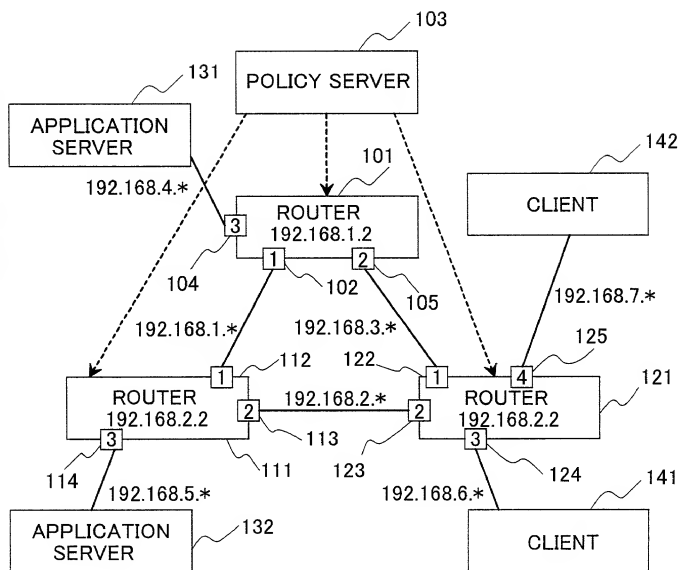


# FIG. 1



# FIG. 2

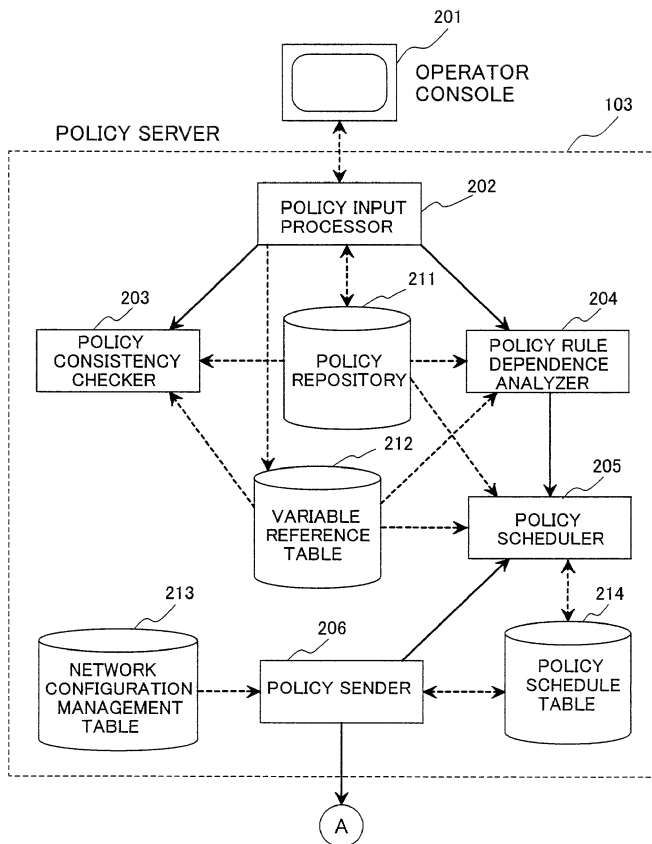


FIG. 3A

CLASSIFICATION	RULE TYPE	CONDITION				ACTION	TIME	
		PROTOCOL	SOURCE IP	DESTINATION IP	DSCP		FROM	TO
↑ 302		↑ 303	↑ 304	↑ 305	↑ 306	↑ 307	↑ 308	↑ 309
		TCP	192.168.4.1	-	-	VIDEO	SAT	SUN

RULE TYPE	CONDITION				ACTION	TIME	
	LABEL	RATE UNIT	COMMITTED RATE	BURST RATE		FROM	TO
	POLICING	VIDEO SOURCE	KBPS	>=1000		-	VIDEO POLICE
↑ 322	↑ 323	↑ 324	↑ 325	↑ 326	↑ 327	↑ 328	↑ 329

341  
↓

RULE TYPE	CONDITION	ACTION							TIME	
		LABEL	DS CP	DISCARD			LABELING	FROM	TO	
				ALG	RATE	UNIT				MIN
QOSACTION										
	VIDEOSOURCE	EF	WRED	300	PACKETS	50	100	VIDEOSEDL	SAT	SUN
↑ 342	↑ 343	↑ 344	↑ 345	↑ 346	↑ 347	↑ 348	↑ 349	↑ 350	↑ 351	↑ 352

FIG. 3B

361  
↓

RULE TYPE	CONDITION	ACTION						TIME	
		DS CP	DISCARD			LABELING	FROM	TO	
			ALG	RATE	UNIT	MIN	MAX		
↑ 362	↑ 363 VIDEOPOLICE	-	↑ 364	↑ 365	↑ 366	↑ 367	↑ 368	↑ 369	↑ 370
		-	-	-	-	-	-	-	↑ 371
									↑ 372
									↑ 372

381  
↓

RULE TYPE	CONDITION	ACTION						TIME	
		RATE UNIT	MIN RATE	MAX RATE	PARENT	FROM	TO		
↑ 382	↑ 383 VIDEOSCHEDL	↑ 384	↑ 385	↑ 386	↑ 387	↑ 388	↑ 389	↑ 389	↑ 389
		KBPS	1000	2000	PRIORITYSCHEDL	SAT	SUN		

# FIG. 4A

401



RULE ID	RULE TYPE	CONDITION	ACTION	
#1	CLASSIFICATION	→ (A)	1	← 402
#2	POLICING	→ (B)	2	← 403
#3	QOSACTION	1	→ (C)	← 404
#4	QOSACTION	2	→ (D)	← 405
#5	SCHEDULING	3	→ (E)	← 406

↑ 411                      ↑ 412                      ↑ 413                      ↑ 414

# FIG. 4B

(A) →	PROTOCOL	TCP	← 421
	SOURCEIPMIN	192.168.4.1	← 422
	SOURCEIPMAX	192.468.4.1	← 423
	SOURCEPORT	NULL	← 424
	DESTINATIONIPMIN	NULL	← 425
	DESTINATIONIPMA X	NULL	← 426
	DESTINATIONPORT	NULL	← 427
	DSCP	NULL	← 428

(B) →	LABEL	1	← 431
	COMMITTEDRATE	1000	← 432
	BURSTRATE	NULL	← 433

(C) →	DSCP	46	← 441
	DISCARDALGORITHM	WRED	← 442
	DISCARDRATE	300	← 443
	THRESHOLDUNIT	PACKETS	← 444
	MINTHRESHOLD	50	← 445
	MAXTHRESHOLD	100	← 446
	LABELING	3	← 447

(D) →	DSCP	255	← 451
	DISCARDALGORITHM	DROPALL	← 452
	DISCARDRATE	NULL	← 453
	THRESHOLDUNIT	NULL	← 454
	MINTHRESHOLD	NULL	← 455
	MAXTHRESHOLD	NULL	← 456
	LABELING	NULL	← 457

(E) →	MINRATE	1000	← 461
	MAXRATE	2000	← 462
	PARENT	PRIORITYSHEDL	← 463

# FIG. 5

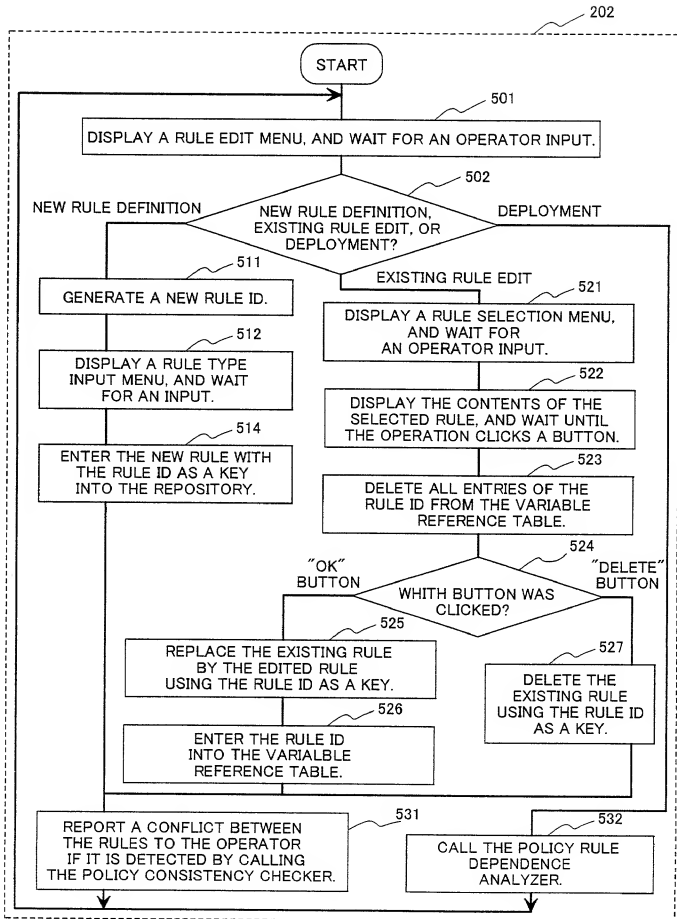
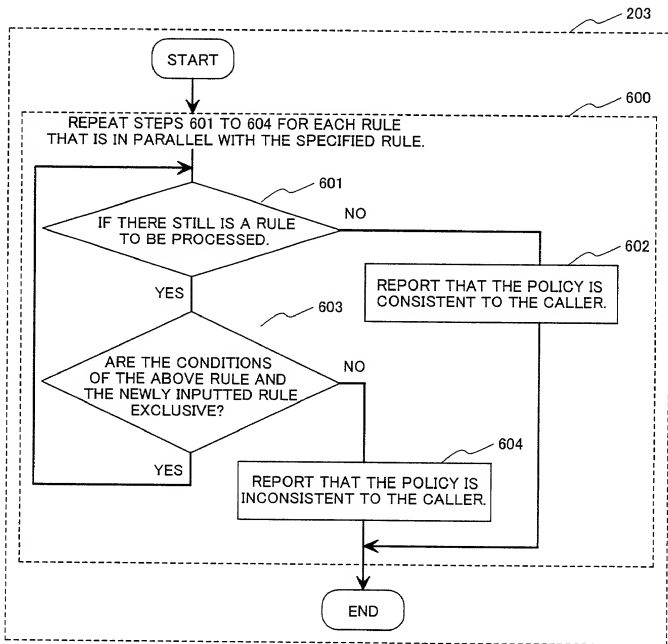


FIG. 6





# FIG. 7

213



RULE ID	EVENT	NEXT TIME	TIME	
#1	DEPLOY	1999-11-27 0:00	SAT	← 702
#3	DEPLOY	1999-11-27 0:00	SAT	← 703
#5	DEPLOY	1999-11-27 0:00	SAT	← 704
#2	DEPLOY	1999-11-27 9:00	9:00	← 705
#4	DEPLOY	1999-11-27 9:00	9:00	← 706
#2	UNDEPLOY	1999-11-27 17:00	17:00	← 707
#4	UNDEPLOY	1999-11-27 17:00	17:00	← 708
#1	UNDEPLOY	1999-11-29 0:00	SUN	← 709
#3	UNDEPLOY	1999-11-29 0:00	SUN	← 710
#5	UNDEPLOY	1999-11-29 0:00	SUN	← 711

↑ 721      ↑ 722      ↑ 723      ↑ 724

FIG. 8

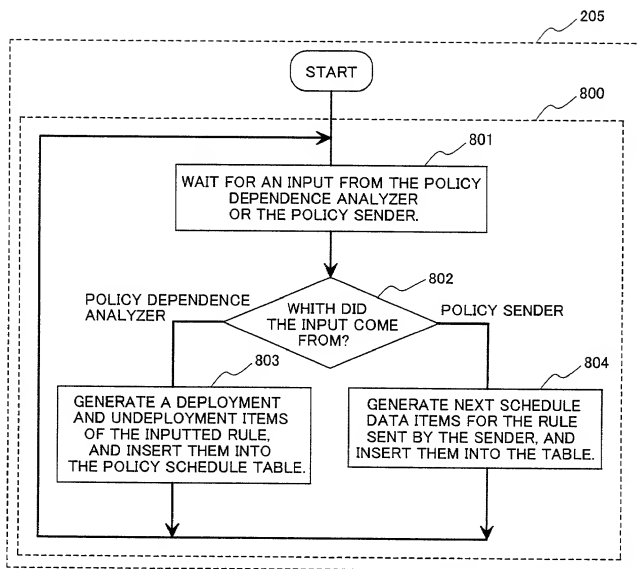


FIG. 9

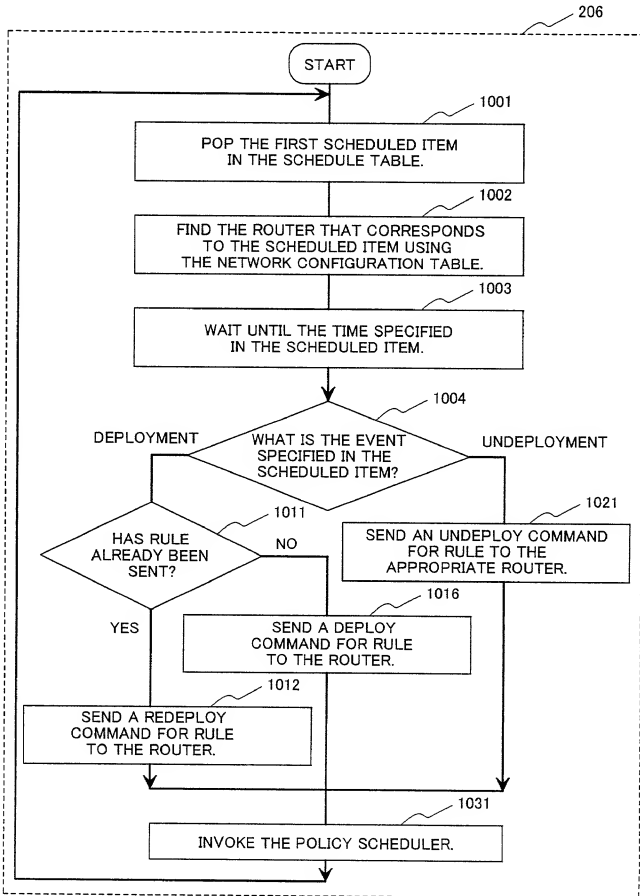
212  
↓

TARGET IP	ROUTER IP	INTERFACE	
192.168.4.*	192.168.1.2	3	← 902
192.168.5.*	192.168.2.2	3	← 903
192.168.6.*	192.168.3.2	3	← 904
192.168.7.*	192.168.3.2	4	← 905

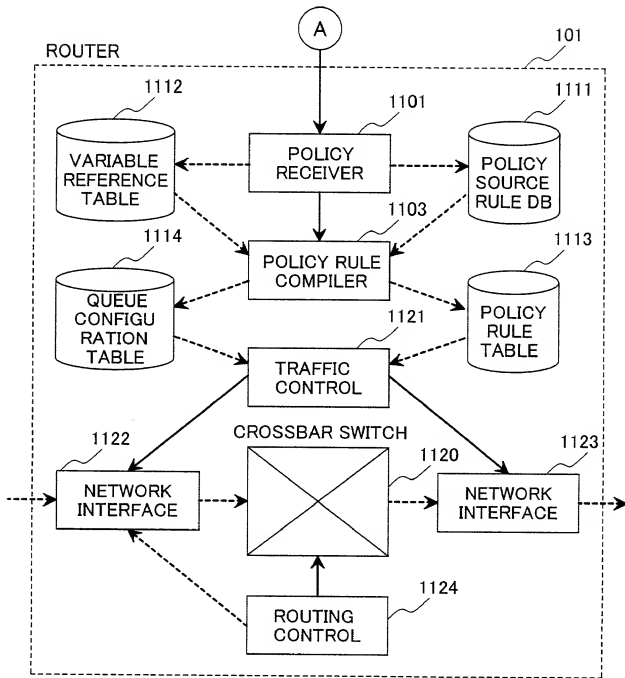
↑                      ↑                      ↑

911                      912                      913

FIG. 10



# FIG. 11



# FIG. 12

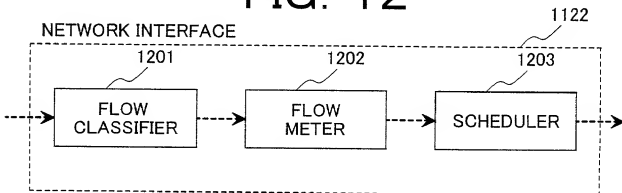


FIG. 13

1111 ↓	RULE ID	RULE TYPE	CONDITION	ACTION	INTERFACE	CODEP
	#1	CLASSIFICATION	→ (A)	1	3	90 ← 1302
	#2	POLICING	→ (B)	2	3	90 ← 1303
	#3	QOSACTION	1	→ (C)	3	90 ← 1304
	#4	QOSACTION	2	→ (D)	3	90 ← 1305
	#5	SCHEDULING	3	→ (E)	3	5 ← 1306
↑	1311	↑	↑	↑	↑	↑
		1312	1313	1314	1316	1317

# FIG. 14A

1401  
↓

VARIABLE  
DEFINITION  
TABLE

1	#1	← 1411
2	#2	← 1412
3	#3	← 1413

1421      1422  
↓          ↓

VARIABLE  
DEFINITION  
TABLE

1	#2	#3	← 1431
2	#4		← 1432
3	#5		← 1433

# FIG. 14B

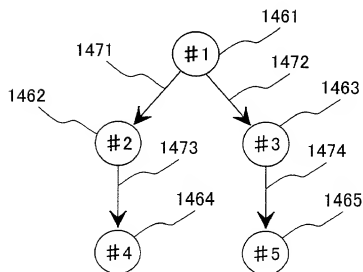


FIG. 15

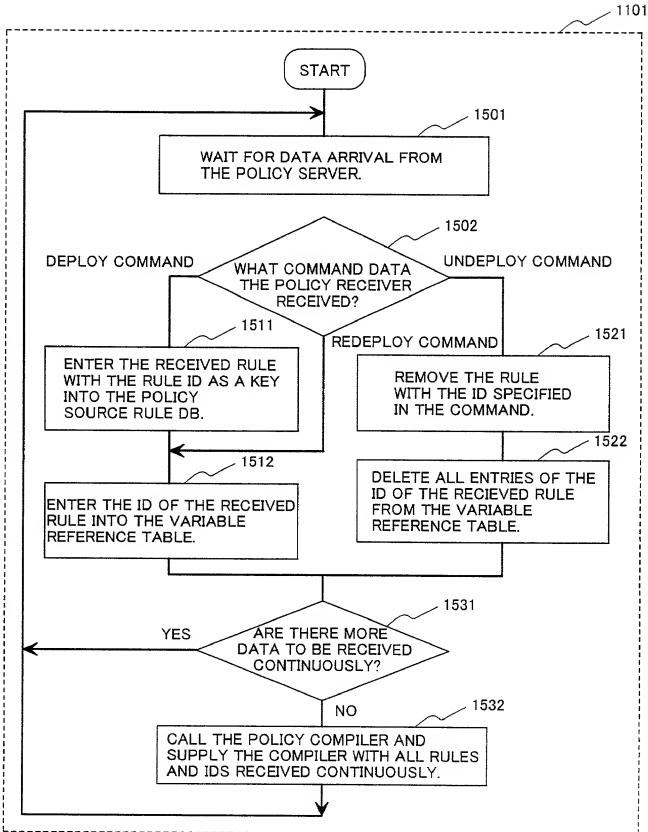
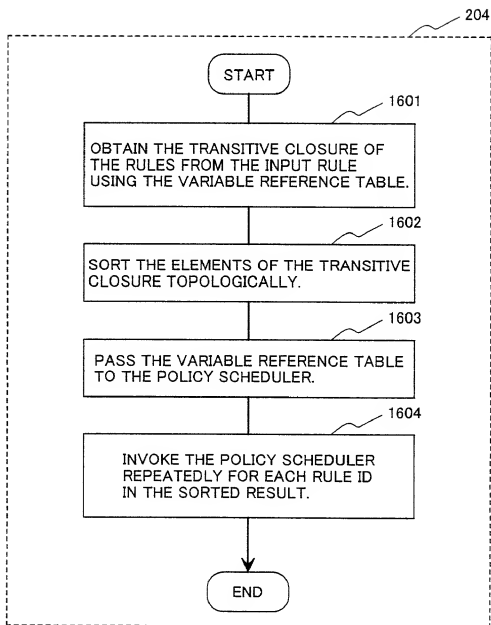




FIG. 16



# FIG. 17

INTERFACE # 1701

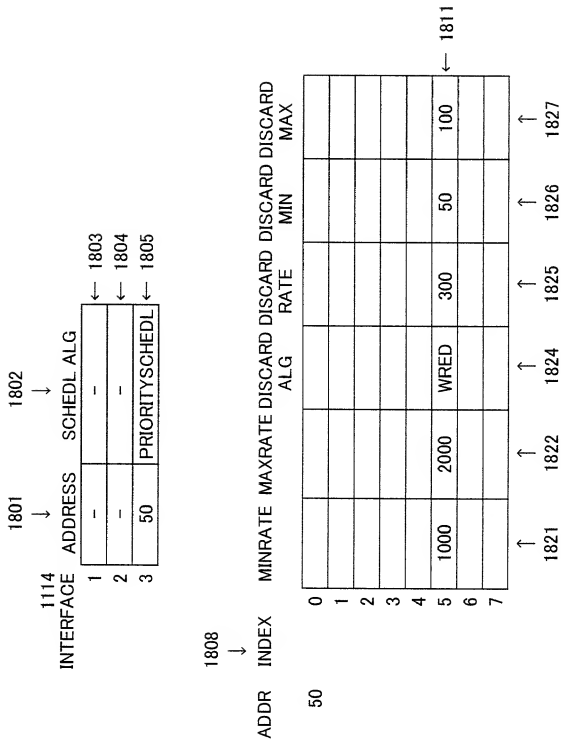
1	-	← 1702
2	-	← 1703
3	90	← 1704

1708

ADDR- SOURCE IP SOURCE IP SOOUR DEST IP DEST IP MAX DEST DS COM BURST QU NEW PENAL-  
ESS MIN MIN MIN MIN MIN MIN RATE RATE EUE DSC TY  
PORT PORT PORT PORT PORT PORT RATE P ACTION

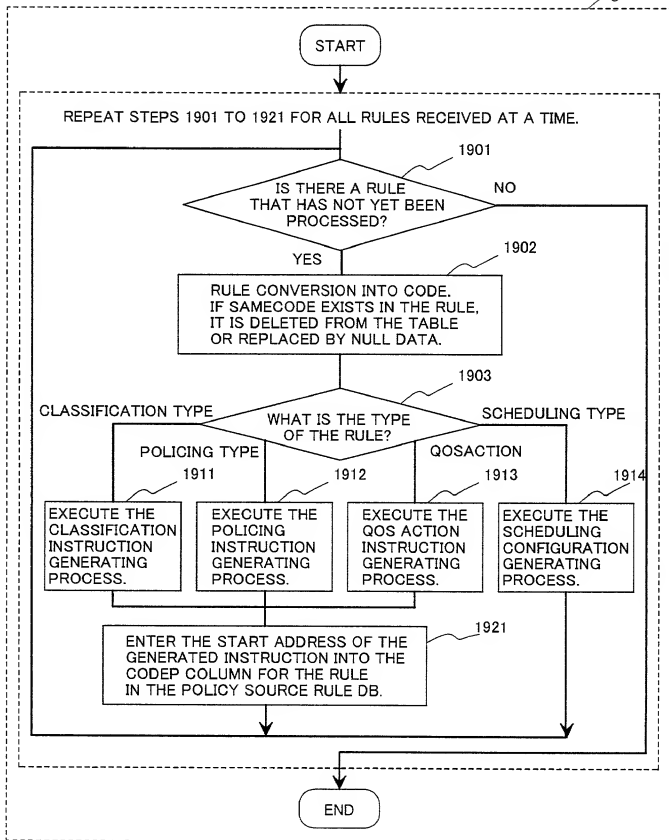
90	192.168.4.1	192.168.4.1	0	0.0.0.0	255.255.255.255	0	255	1000	0	5	EF	DROP
	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
1721	1721	1722	1723	1724	1725	1726	1727	1728	1729	1730	1731	1732

FIG. 18

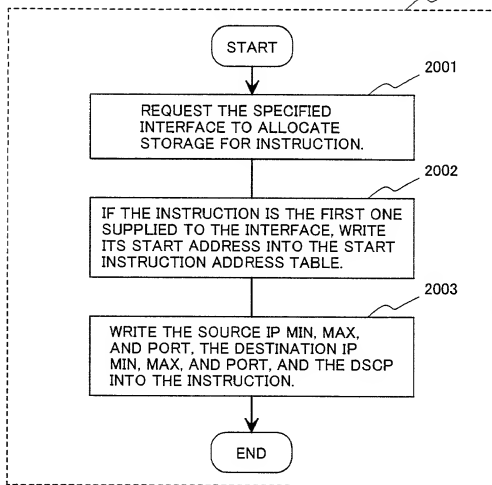


# FIG. 19

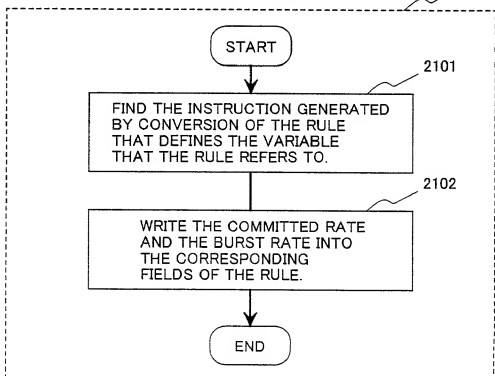
1103



# FIG. 20



# FIG. 21



# FIG. 22

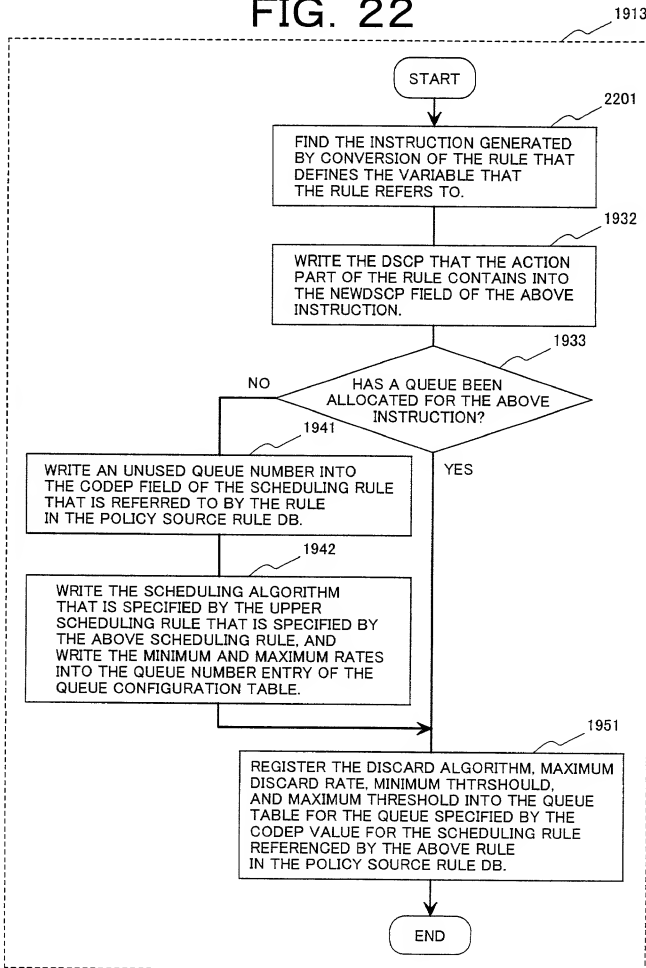
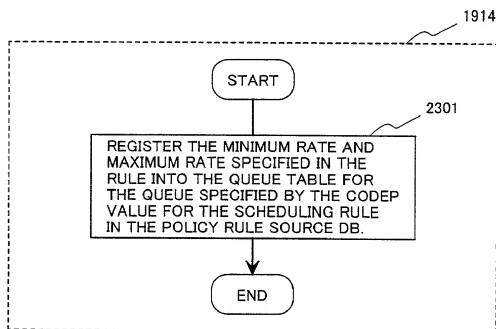


FIG. 23



# FIG. 24

		2402	2403	2404	
2401		↓	↓	↓	
OP, RULEID, INTERFACE	DEPLOY	#1	3		
CONDITIONLENGTH	32				← 2412
PROTOCOL	TCP				← 2413
SOURCEIPMIN	192.168.4.1				← 2414
SOURCEIPMAX	192.168.4.1				← 2415
SOURCEPORT	NULL				← 2416
DESTINATIONIPMIN	NULL				← 2417
DESTINATIONIPMAX	NULL				← 2418
DESTINATIONPORT	NULL				← 2419
DSCP	NULL				← 2420
ACTIONLENGTH	12				← 2421
NEWLABEL	1				← 2422
COMMITTEDRATE	1000				← 2423
BURSTRATE	NULL				← 2424

		2432	2433	2434	
2431		↓	↓	↓	
OP, RULEID, INTERFACE	REDEPLOY	#1	3		

		2442	2443	2444	
2441		↓	↓	↓	
OP, RULEID, INTERFACE	UNDEPLOY	#1	3		



FIG. 25A

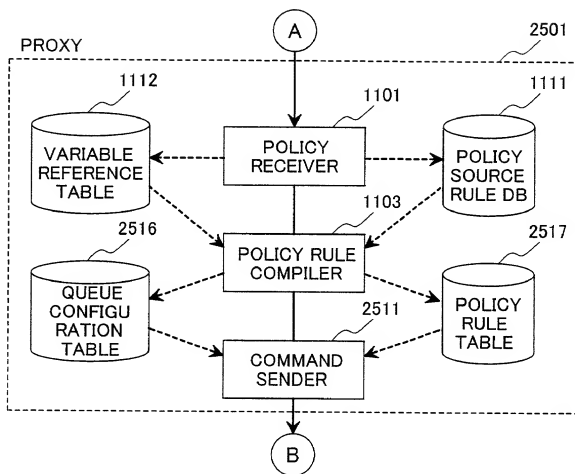
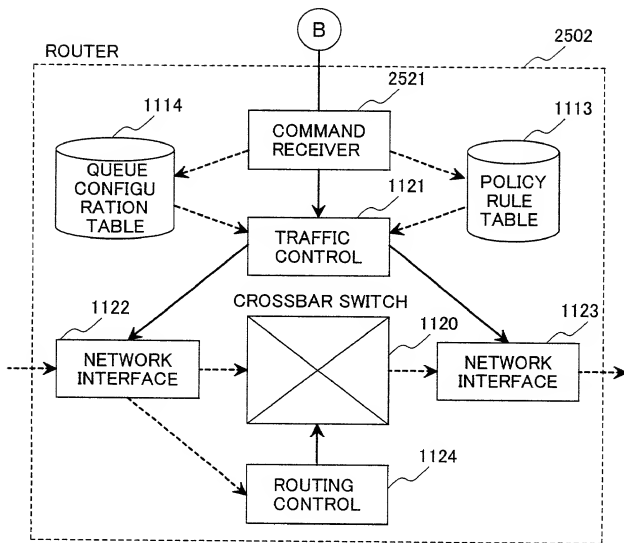
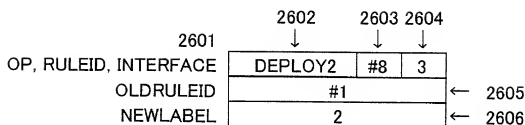


FIG. 25B



# FIG. 26



# FIG. 27

